

b. Disposal Alternative**■ Probable Indirect and Cumulative Impacts**

Any redevelopment (construction) activities associated with transferred Sunflower parcels would involve varying degrees of clearing and excavation, reconfiguring present topography to accommodate building footprints along with other on-site developments such as access roads and parking facilities. However, it is anticipated that any development will follow guidelines in accordance with the *Johnson County Conceptual Land Use Plan*, and applicable federal, state and local regulations. The *Johnson County Conceptual Land Use Plan* calls for parks/open space adjacent to the three creeks that flank Sunflower, and areas most susceptible to topographic alteration are situated proximate to these creeks.

■ Mitigation

Adherence to the *Johnson County Conceptual Land Use Plan*, as well as federal, state and local regulations regarding wetlands, floodplains, soil erosion and sediment control will protect against potential adverse impacts. No further mitigation action is warranted.

In accordance with CERCLA section 120(h)(3) and Army policy, and in consultation with KDHE, GSA will impose deed restrictions to protect against soil disturbance in certain areas. To protect human health and the environment, these deed restrictions will be applied, pending all necessary remediation, to parcels designated by KDHE or the Army with contaminated or potentially contaminated soils.

2. Geology**a. No-Action Alternative****■ Probable Indirect and Cumulative Impacts**

No impacts to geology are expected under the No-Action Alternative.

b. Disposal Alternative**■ Probable Indirect and Cumulative Impacts**

Development of Sunflower would require varying degrees of excavation, but is not likely to adversely affect geological features of the property.

■ Mitigation

No mitigation measures are warranted.

3. Soils**a. No-Action Alternative****■ Probable Indirect and Cumulative Impacts**

No adverse impacts are expected under the No Action Alternative except possibly the livestock grazing currently conducted at Sunflower.

b. Disposal Alternative**■ Probable Indirect and Cumulative Impacts**

Although much of Sunflower is considered prime farmland soils and farmlands of statewide importance (according to a 1979 Soil Conservation Service report), little if any farming currently is conducted. (It should be noted that soil type is only one of several criteria that must be satisfied in the determination of prime farmland status.) *Johnson County's Conceptual Land Use Plan* for Sunflower does not contemplate use of the property for farming. Please see the analysis in the Disposal Alternative paragraph in "Topography" above.

■ Mitigation

No mitigation is required. With respect to protection against contaminated soils, please see the Mitigation paragraph in "Topography" above.

4. Hydrology**a. No-Action Alternative****■ Probable Indirect and Cumulative Impacts**

The No-Action Alternative is not anticipated to result in any impacts to groundwater, surface water or wetlands except that which may be associated with current activities under existing leases or Facility Use Agreements. This alternative precludes protections to water resources that would be available under the *Johnson County Conceptual Land Use Plan* (which contemplates extensive park areas along all creeks) and associated land use restrictions.

b. Disposal Alternative**■ Probable Indirect and Cumulative Impacts**

Development and construction would result in the addition of impervious surfaces (buildings, parking areas, walkways, etc.), causing increased surface water runoff. It is not possible to predict precisely the volumes of stormwater runoff resulting from future redevelopment or potential effects on groundwater recharge rates.

■ Mitigation

Existing regulations and restrictions with respect to floodplains, wetlands, stormwater management, and *Johnson County's Conceptual Land Use Plan* are sufficient to address potential impacts to water resources.

In consultation with KDHE and Army and pursuant to CERCLA section 120(h)(3)(C), GSA will put deed restrictions on areas with known or suspected groundwater contamination to prohibit construction of wells or use of groundwater pending completion of necessary remediation.

5. Biological Resources

a. No-Action Alternative

■ Probable Indirect and Cumulative Impacts

The No-Action Alternative is not anticipated to result in any impacts to biological resources except that which may be associated with current activities under existing leases or Facility Use Agreements. This alternative precludes protections to biological resources that would be available under the *Johnson County Conceptual Land Use Plan* (which contemplates extensive park areas along all creeks) and associated land use restrictions.

b. Disposal Alternative

■ Probable Indirect and Cumulative Impacts

Vegetation anticipated to be disturbed by future reuse activities is expected to be common prairie grasses. Any future development may displace wildlife. Some species will adapt better than others to displacement. Considerable diversity of wildlife has been identified on or near the property. The richest habitats are the forested corridors along the streams on the east and west sides of the property, areas intended to remain undeveloped. There is a broad range of cover and food for many species, and within the corridors there is also an aquatic environment with its own characteristics. This forested area is important to flood control as well as to wildlife habitat.

■ Mitigation

No mitigation is necessary as *Johnson County's Conceptual Land Use Plan* contemplates protection of the stream/wildlife corridors as parks/open space.

6. Historical and Archeological Resources

a. No-Action Alternative

■ Probable Indirect and Cumulative Impacts

Retention of Sunflower by the U.S. Army would likely result in minimal impact on the historical and archeological resources, except insofar as removal of buildings and structures might cause limited ground disturbances. Construction and operation of the facility have already resulted in ground disturbance activities immediately surrounding buildings and structures. In addition, the no action alternative would preclude the advantages and protections that would be afforded by a funded (and thereby an accelerated) survey of the property to determine the number and locations of prehistoric and historic archeological sites.

b. Disposal Alternative

■ Probable Indirect and Cumulative Impacts

The probable impacts on historical and archeological resources at Sunflower resulting from the disposal of the property are difficult to define because the information about them is incomplete. Currently only about 624 acres have been surveyed for prehistoric or historic sites. The Dr. Sam Roberts House (Building No. FH-3), has been determined eligible for the National Register and has been documented by HABS/HAER

recordation. All of the over 1,200 military structures related to the operation of Sunflower, which date from 1942 through the Cold War era, have been determined ineligible for the National Register. The floodplains and terraces along Captain, Spoon, and Kill Creeks, as well as their tributaries, have a high potential for including prehistoric archeological sites. The uplands have low potential for prehistoric sites, however, at least two communities (Lexington and Prairie Center) were known to be located on the uplands. It is uncertain to what degree construction and operation of Sunflower has negatively impacted these historic sites.

Lower intensity development of Sunflower over the next five years would result in some ground disturbance because as much as 150 acres could be developed. Higher intensity development could result in more extensive areas of ground disturbance because perhaps as much as 850 acres, including the theme park/entertainment complex, could be developed during the next five years. Until a comprehensive archeological survey and archival research of high potential sites can be used to identify the location of archeological sites, if any, and begin to evaluate their integrity and significance an accurate determination of probable impacts is not possible.

■ Mitigation

Mitigation of the cultural resources at Sunflower first requires an archeological survey and additional archival investigations to locate prehistoric and historic sites within the property boundaries. A reconnaissance level survey of the high potential areas (the floodplains and terraces of Captain, Spoon, and Kill Creeks and their tributaries) is recommended to locate prehistoric sites. Prehistoric sites rarely occur in upland settings in this region because of the exposed conditions and thin topsoil. When found, these sites tend to be isolated finds or small, thin lithic scatters which seldom can be related to specific cultures or time periods. Historic sites, such as campsites, trail crossings, bridge remains, mills, or homesteads, also may occur in the drainages.

Archival investigations are recommended to pinpoint the locations of historic sites and structures related to individual farmsteads, businesses, residences, schools, places of worship, etc. Dates of occupation and abandonment, construction of buildings and improvements on farmlands can be obtained that will help to identify the uses, lengths of occupation, and geographical organization of these sites. Information about individuals living at the sites may be used to discover more about specific historical events relating to the early history of the region and State.

The information collected from these activities can be used by the State of Kansas and Johnson County administrators to manage cultural resources effectively. Development projects can be designed to avoid or minimally impact specific historical properties determined eligible for inclusion in the National Register. Information about particular historical properties and regional history can be incorporated into future proposed projects to educate the public about past lifeways and events and historical preservation issues.

GSA will impose deed restrictions that will preclude any ground-disturbing activities at Sunflower until the State Historic Preservation Officer (SHPO) has concurred in the results of an Archaeological Reconnaissance Survey (ARS) similar to the example in Appendix C. In addition, deed restrictions will provide that all the property identified in red or white in Exhibit C-2, Appendix C, will be surveyed within 180 days of the transfer of title by GSA.

The deed restrictions will provide that no site identified in the ARS that may be eligible for inclusion in the National Register of Historic Places will be disturbed, destroyed, or otherwise altered without the express written permission of the SHPO.

7. Hazardous Substances and Other Contamination Issues

a. Introduction

Probable indirect and cumulative impacts related to the existence of hazardous substances and other contaminants at Sunflower are discussed together rather than by segments as done in Section III. Exhibit IV-2 depicts the *Johnson County Conceptual Land Use Plan* and the locations of the segments. The 54 solid waste management units (SWMUs) are identified as known or potential areas of contamination. Exhibit III-9 depicts the location of the 54 SWMUs. In addition to SWMUs, other areas of concern are the potential non-CERCLA contaminated areas. Exhibit IV-3 uses EBS data (as discussed in Section III) to approximate the areas that may be made subject to use restrictions. Currently anticipated deed restrictions include prohibitions against: (1) use for residential purposes; (2) use of groundwater; (3) soil disturbance; and (4) construction or soil disturbance in landfill areas.

b. No-Action Alternative

■ Probable Indirect and Cumulative Impacts

The existing hazardous substance impacts would likely continue until remediated. In its March 1999 Installation Action Plan, the Army projected that it will complete overall cleanup of Sunflower (i.e., the Installation Restoration Program) by September 2030.

c. Disposal Alternative

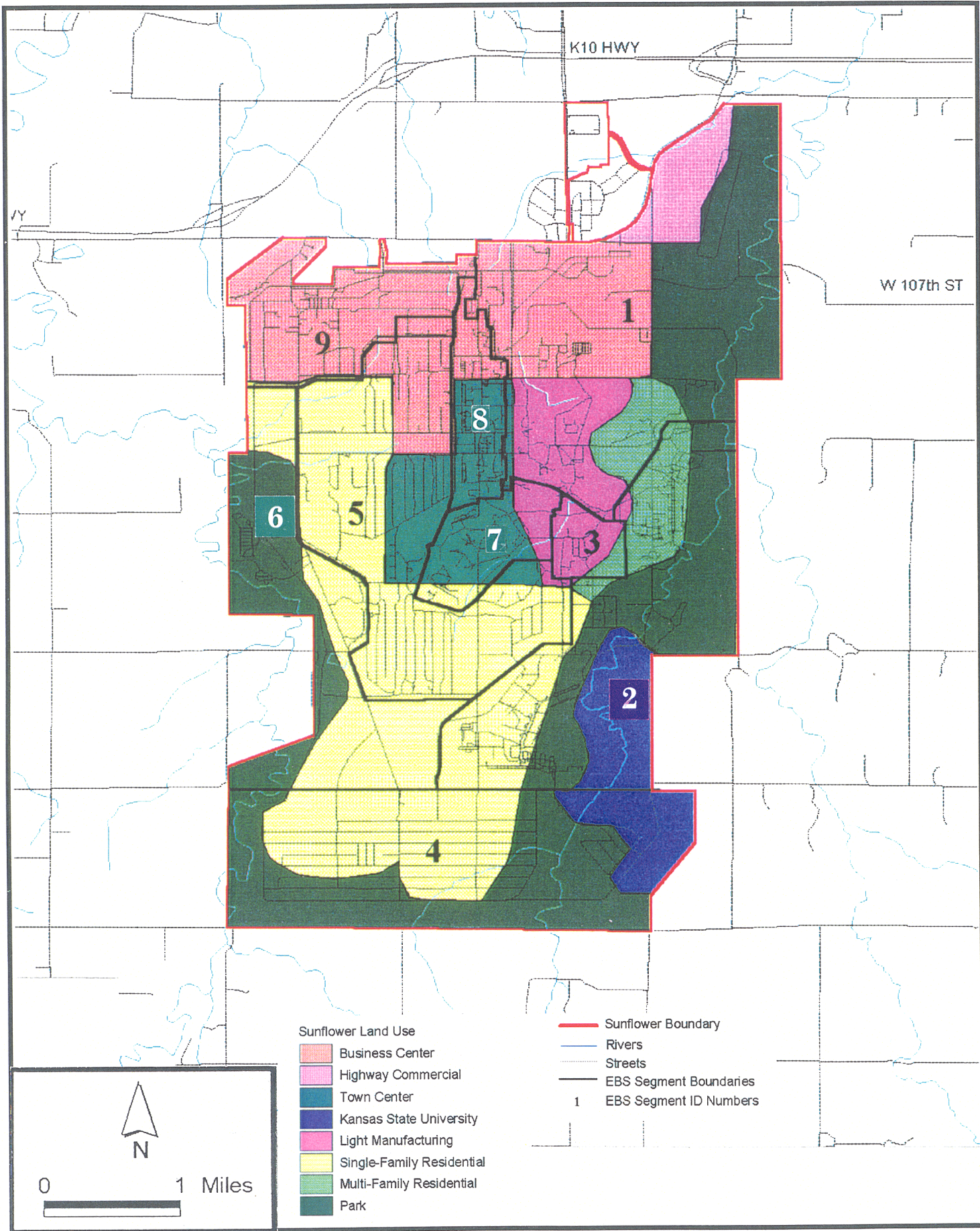
■ Probable Indirect and Cumulative Impacts

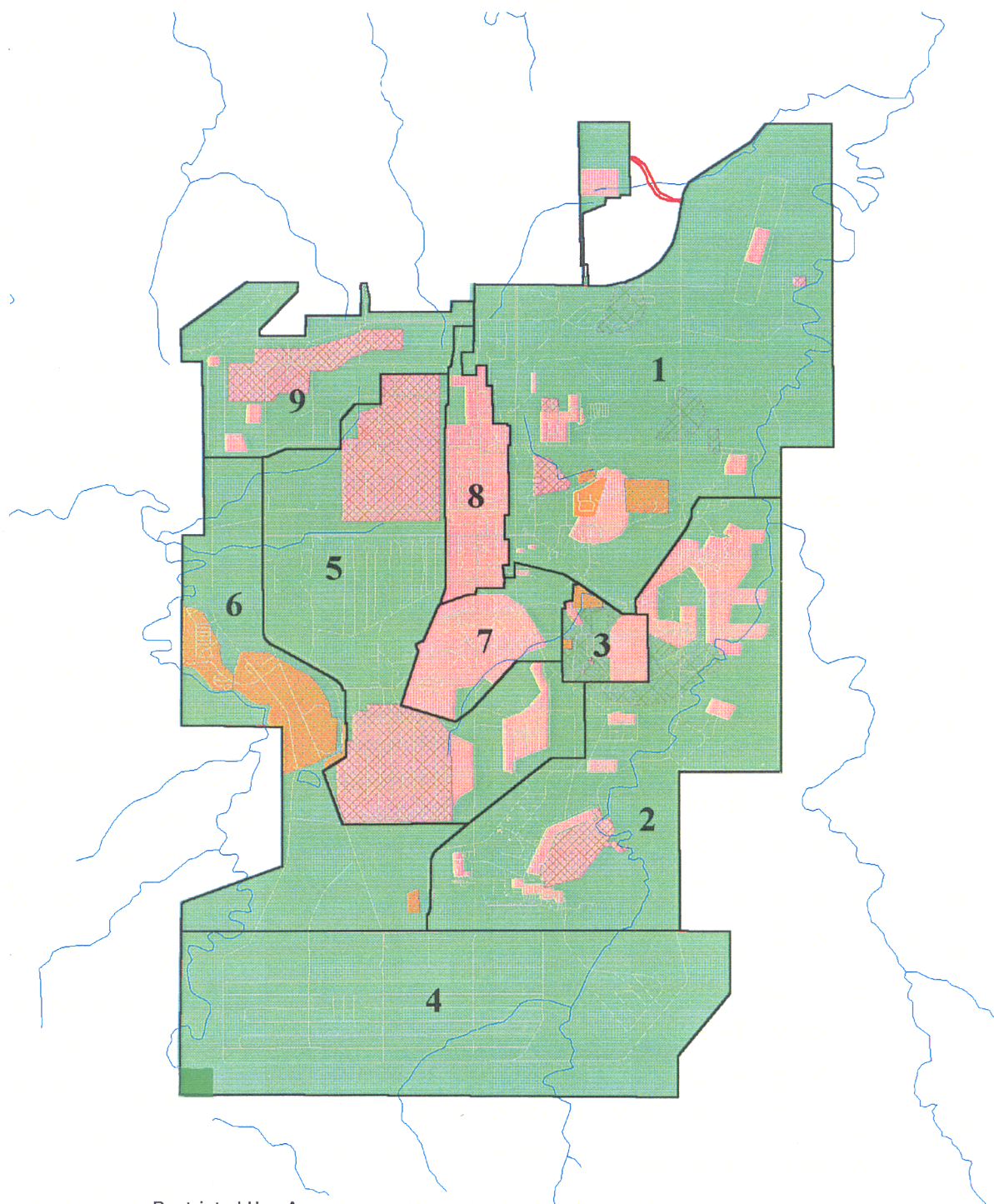
The two disposal scenarios are expected to result in similar environmental impacts. Both scenarios will likely result in accelerated cleanup compared to the no action alternative as funds will not be subject to OMB review or congressional authorization and appropriation and may be more available and forthcoming in the private sector. Remediation may occur at a faster pace if Sunflower is disposed of to the State of Kansas than it would with disposal to one or more other entities over time. Financial incentives for developers and state support could bring funds and resources to bear that otherwise might not be available.





■ Mitigation






In order to protect human health and the environment pending the completion of all necessary remediation, and pursuant to CERCLA section 120(h)(3)(C), GSA will impose deed restrictions on any portions of the property, determined in consultation with KDHE and the Army, known to be or suspected of being contaminated. Deed restrictions currently contemplated include prohibitions against residential use, use of groundwater, soil disturbance, and construction or soil disturbance in landfill areas. In addition, if there is potential for any explosive material to be left in walls, foundations, soil around foundations, sewer lines or sumps, or anywhere else, the Army will either retain these parcels until they are remediated to the satisfaction of KDHE and the Army, or restrict use of these parcels through deed restrictions developed in consultation with KDHE to eliminate all reasonable risk of harm to human health and the environment.

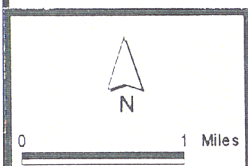
Exhibit IV-4 illustrates by Segment an estimate of the number of acres that could become subject to deed restrictions should Sunflower or portions thereof be transferred to non-federal entities. The number of acres in each category are rough, preliminary estimates but are believed to be conservative in that they depict a generous number of acres subject to restriction. Confirmation of the existence or absence of contamination, as well as characterization of the extent of known contamination is ongoing. However, deed restrictions will



**Restricted Use Areas
Known To Date**

-  RESTRICTED TO NON-RESIDENTIAL USE
-  NO CONSTRUCTION IN CAPPED AREAS
-  GROUNDWATER RESTRICTIONS
-  NO RESTRICTED USE

-  Sunflower Boundary
-  Rivers
-  Streets
-  EBS Segment Boundaries
-  EBS Segment ID Numbers



Source: SFAAP Environmental Baseline Survey
US Army, Industrial Operations Command (IOC), Oct. 1998
BOOZ•ALLEN & HAMILTON 18 JAN. 1999

Louis Berger & Associates, Inc.

EXHIBIT IV-4

AREAS ANTICIPATED TO HAVE RESTRICTED USE

Restriction Type*	Area of the Restriction (Acres)								
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8	Segment 9
Non-residential use	136.1	284.8	55.3	0	548.9	0	200.7	230.7	128.3
Groundwater restriction	124.5	138.1	72.7	0	474.6	198.5	0	0	113.7
Construction restriction in landfill capped areas	47.9	0	12	0	0	198.5	0	0	0
No restrictions	2,134.80	1,189.20	68	1,698	874.3	808.2	93.3	30.6	459.9

*Some areas have more than one restriction designation.

Source: SFAAP Environmental Baseline Survey, U.S. Army Industrial Operations Command, October 1998.

be imposed in areas where contamination is suspected (due to past use or other historical information) but unconfirmed. The number of acres subject to deed restrictions is expected to change as new information (e.g., sampling data) becomes available.

8. Aesthetics

a. No-Action Alternative

■ Probable Indirect and Cumulative Impacts

Under the No-Action Alternative, Roberts House and Roberts Lake would not be transferred through public benefit discount conveyance. This would deprive the general public of the use of this recreational and visual resource. It would also result in the continuation of decline in the condition of the structure, and increase the cost of rehabilitating the building at the time of future disposal of Sunflower.

The overall condition of remaining structures at Sunflower would generally continue to decline under the No-Action Alternative. Though the U.S. Army is proceeding with demolition of certain structures through its *Environmental Stabilization Program*, that action may take several years, during which time the remaining buildings will continue to deteriorate, resulting in a negative aesthetic impact from these dilapidated structures within Sunflower and from off-site viewsheds. The future of the water towers on the property, which may be considered to contribute to the local aesthetic by virtue of their point of reference, is uncertain under the no action alternative but may be preserved under the disposal alternative and the resultant deed restrictions with respect to historical and archeological resources.

b. Disposal Alternative

■ Probable Indirect and Cumulative Impacts

Disposal of the property may include transfer of the lands comprising Roberts Lake and Roberts House to local governments for park/open space (whether through public benefit discount conveyance or other means, consistent with the *Johnson County Conceptual Land Use Plan*). It is not known how the water towers on

the property, which currently may offer aesthetic contributions in the local context and through point of reference, would be utilized in the future. Even if they remain, their aesthetic value could diminish as new structures that would eventually be built may come to serve as new points of reference. Reuse of portions of the property that contain abandoned structures may facilitate the removal of these dilapidated buildings, improving the aesthetic condition in those portions of the property. Though the Army is proceeding with demolition of structures through its *Environmental Stabilization Program*, it is expected that disposal would accelerate the process considerably.

■ **Mitigation**

No mitigation is necessary. Johnson County land use regulations are expected to ensure any development is sensitive to views and vistas in the community and architectural treatment is harmonious with the surrounding areas. The Johnson County Department of Planning, Development and Codes would be responsible for ensuring that any new development activity was consistent with the *Johnson County Conceptual Land Use Plan* for Sunflower, and that all plans conformed to local regulations, codes and standards.

D. COMMUNITY AND REGIONAL CHARACTERISTICS

1. Population/Employment

a. No-Action Alternative

■ **Probable Indirect and Cumulative Impacts**

There are no anticipated impacts to population or employment as a result of the No-Action Alternative except the continued employment by private companies which are tenants through leases or Facility Use Agreements and continued employment of government workers and government contractors.

b. Disposal Alternative

■ **Probable Indirect and Cumulative Impacts**

Population Impacts

There is currently no residential population at Sunflower, so there is no direct impact for population displacement as a result of the disposal action. Subsequent to disposal, the property has the potential to attract additional permanent population to the site and surrounding area.

Because of the nature of the Kansas City residential real estate market, it is expected that there would not be significant demand for residential development at Sunflower in the next five years. As a result, there would be relatively little population increase under the lower intensity development scenario. Under the higher intensity development scenario for reuse, it is assumed that 150 single-family units would be constructed at Sunflower in the next five years. Based on multipliers supplied by the U.S. Bureau of the Census to account for family sizes in Johnson County, it is expected the total population would increase by 464 persons in the next five years with this development scenario. New families moving to residential development at Sunflower would contribute to the Johnson County property tax base.

It is not expected that redevelopment or construction activity associated with initial reuse of the property would add significantly to the local population. It is anticipated that the Kansas City area labor force would

be able to supply personnel for any construction projects. As a result, construction workers would not be expected to relocate to the Sunflower area. Subsequent to disposal, either the lower or higher intensity development scenarios may produce indirect population impacts. As a result of the non-residential development contemplated in those scenarios, this portion of Johnson County may be perceived as an even more attractive location within which to reside.

Employment Impacts

Subsequent to the disposal action, 98 employees working for the Federal Government or government contractors would be subject to job loss or job relocation as Sunflower moves out of federal ownership. If disposal to a single entity (State of Kansas) occurs, this job loss or relocation will occur over a relatively short period of time. If disposal occurs parcel by parcel over time, this employment would reduce more slowly due to the need of the Federal Government to maintain a presence on those portions of Sunflower that remain under their ownership.

Employees at businesses that currently have Facility Use Agreements at Sunflower also face probable employment impacts, under the same disposal options, as federal employees and contractors. Approximately 55 workers are employed with these businesses. It is not known which businesses might remain at Sunflower. Some operations constitute land uses that are not consistent with the *Johnson County Conceptual Land Use Plan*, and may not be permitted to continue once the property moved out of federal ownership.

It is not known whether businesses that cease operations at Sunflower would relocate within the Kansas City area (resulting in no employment loss), would move outside the Kansas City area or cease to exist.

These negative employment impacts are more than offset by the considerable beneficial employment impacts that would result from reuse of Sunflower. Redevelopment of the property would result in a variety of beneficial employment and fiscal impacts. The extent of these beneficial impacts would vary dependent on the disposal scenario used and upon the intensity of development.

Construction activity associated with reuse would generate numerous short-term employment opportunities (jobs lasting through the duration of the construction activity). Construction activity would also stimulate "spin-off" employment and fiscal impacts from expenditures on area goods and services to support construction work, and by expenditures of construction laborers themselves.

The new businesses locating at Sunflower would create additional employment opportunities. In the high-intensity development scenario, it is estimated that a public entertainment complex would employ approximately 1,500 persons. Additionally, using formulas to estimate the ratio of jobs per square foot of office, retail/commercial, and light industrial/warehousing space, it is calculated that an additional 5,300 jobs would be created by businesses moving into the other redevelopment sites at Sunflower. In the lower intensity development scenario, 2,340 new positions would be anticipated from businesses moving in to new development at Sunflower.

■ **Mitigation**

No mitigation is necessary. Overall, the slight negative impact on existing employment at Sunflower would be more than offset by the increase in short-term (construction) and long-term job creation. Depending on the intensity of development, between 2,340 and 5,300 permanent jobs would likely be created by businesses locating at the property subsequent to disposal and future reuse.